**IOT PRACTICAL CODE**

**Practical-1**

**(BLINK OF SINGLE LED)**

import RPi.GPIO as GPIO

import time

GPIO.setmode(GPIO.BOARD)

GPIO.setup(7,GPIO.OUT)

for i in range(10):

GPIO.output(7,True)

print("LED IS FINALLY ON")

time.sleep(1)

GPIO.output(7,False)

print("LED IS OFF")

time.sleep(1)

print("PROGRAM COMPLETE!")

GPIO.cleanup()

**Practical-2**

**CAPTURE-IMAGE:**

from picamera2 import Picamera2

import time

picam2 = Picamera2()

picam2.start()

time.sleep(2)

picam2.capture\_file(‘image.jpg')

picam2.stop()

print("image captures")

**PREVIEW-IMAGE:**

from picamera2 import Picamera2

from picamera2 import Preview

import time

picam2 = Picamera2()

preview\_config = picam2.create\_preview\_configuration()

picam2.configure(preview\_config)

picam2.start\_preview(Preview.QTGL)

picam2.start()

time.sleep(10)

picam2.stop()

**VIDEO:**

from picamera2 import Picamera2

import time

picam2 = Picamera2()

video\_config = picam2.create\_video\_configuration()

picam2.configure(video\_config)

picam2.start()

picam2.start\_recording("video.h264")

time.sleep(10)

picam2.stop\_recording()

picam2.stop()

print("video saved")

**PRACTICAL-3**

**(4 LED PATTERN)**

import RPi.GPIO as GPIO

import time

GPIO.setmode(GPIO.BOARD)

GPIO.setup(3, GPIO.OUT)

GPIO.setup(5, GPIO.OUT)

GPIO.setup(7, GPIO.OUT)

GPIO.setup(8, GPIO.OUT)

while True:

GPIO.output(3, 1)

GPIO.output(5, 1)

GPIO.output(7, 1)

GPIO.output(8, 0)

time.sleep(2)

GPIO.output(3, 0)

GPIO.output(5, 0)

GPIO.output(7, 1)

GPIO.output(8, 1)

time.sleep(1)

**PRACTICAL-4**

**(TIME)**

GITHUB-LINK:[raspberrypi-examples/actor-led-7segment-4numbers at master · timwaizenegger/raspberrypi-examples (github.com)](https://github.com/timwaizenegger/raspberrypi-examples/tree/master/actor-led-7segment-4numbers)